

What is claimed is:

1. An AS die casting alloy, in particular for automotive components susceptible to thermal stress,
wherein the Al content is between the Al content of the AS21 and AS41 alloys.
2. The AS die casting alloy as recited in Claim 1,
wherein the Al content is between 2.5 wt.% and 4 wt.%, in particular between 2.8 wt.% and 3.5 wt.%, and preferably 3 wt.%.
3. The AS die casting alloy as recited in one of the preceding claims,
wherein it is an MgAl3Si1 alloy (AS31).
4. The AS die casting alloy as recited in one of the preceding claims,
wherein the Mn content is > 0.20 wt.%.
5. The AS die casting alloy as recited in one of the preceding claims,
wherein the Cu content is < 100 ppm.
6. The AS die casting alloy as recited in one of the preceding claims,
wherein the Ni content is < 20 ppm.
7. The AS die casting alloy as recited in one of the preceding claims,
wherein the Fe content is < 50 ppm.
8. The AS die casting alloy as recited in one of the preceding claims,
wherein the Si content is between 0.7 wt.% and 1.5 wt.%.
9. The AS die casting alloy as recited in one of the preceding claims,
wherein the Zn content is < 0.20 wt.%.

10. The AS die casting alloy as recited in one of the preceding claims,
wherein a relatively high amount of Al is dissolved in the Mg matrix.
11. The AS die casting alloy as recited in one of the preceding claims,
wherein it is water-quenched.
12. A method for manufacturing a thermally stressable component made of an AS die casting
alloy as recited in one of the preceding claims,
wherein it is water quenched after casting or after the die casting mold is opened.
13. The method as recited in Claim 12,
wherein water quenching takes place 60 s, in particular 40 s, preferably 30 s after casting or
after the die casting mold is opened.